

# IMPACT EVALUATION

## The Democratic Republic of the Congo Pilot Program Evaluation Plant With Purpose

**A Summary of the Impact following the two year pilot  
project (July 2015 to July 2017)**

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# DRC Pilot Project – Impact Evaluation (2017)

In July 2017, Plant With Purpose completed a two year pilot project in the Kakumba watershed in the Democratic Republic of the Congo. This evaluation provides a summary of the impact from those first two years. It serves as an early look at the broader impact of Plant With Purpose programs around the world. A global impact report will be published in early 2018.

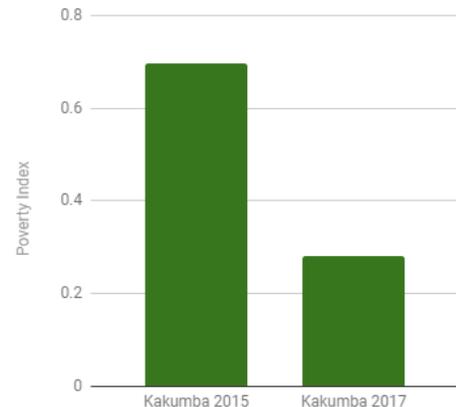
The pilot project evaluation included a survey of 320 families, focus groups, and analysis of satellite imagery data. A nearby watershed, Kambekulu, was used as a control. Kambekulu and Kakumba were very similar across a broad range of indicators at the time of the baseline study in 2015. By 2017, Kakumba, where the Plant With Purpose pilot program took place, looked vastly different.

## REVERSING RURAL POVERTY

People are at the core of Plant With Purpose’s mission. Everything we do from environmental restoration to economic development and spiritual renewal is centered on transforming the lives of rural poor families, creating an environment where all people can flourish. We have a long way to go in the DRC before our work is finished, but in just the first two years, all families living in Kakumba, the Plant With Purpose watershed, cut their level of poverty by 60 percent. This includes all 17,350 people (2,500 families) living in the Kakumba watershed, *and not just direct participants.*

Direct participants cut poverty by 68% in just two years, twice as fast as prior trials. Also excellent was the impact on indirect participants who experienced a 44% reduction in poverty due to environmental restoration and church partnerships. Comparison watersheds saw no change, which further proves that the impact on poverty reduction was a direct result of Plant With Purpose programs.

60 Percent Decrease in Poverty Levels



## Environmental Restoration

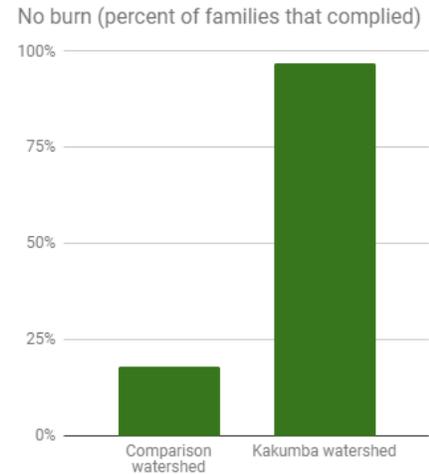
The quality of the environment is one of the most important factors for families dependent on their land. Environmental degradation is both a cause and a symptom of poverty. Plant With Purpose takes a people-centered approach to environmental restoration. We partner with local communities to combat deforestation, replenish watersheds, and improve soil fertility. When the quality of the environment improves, farming families’ lives also improve.

**Reversing Deforestation.** We use a remote sensing tool called Normalized Difference Vegetation Index (NDVI) to measure gain or loss in vegetation cover. This is our primary tool to measure whether or not our efforts are effectively reversing deforestation. We saw a slight change in NDVI in Congo, but it is too early to know if this is sustained change or if we can attribute it to our work. It takes several years of measurement across seasons and weather patterns to confirm positive change in NDVI. However, we can measure outcomes that indicate positive movement towards reforestation is taking place. These include the following:

- Kakumba families have stopped burning their fields. Only 2.5 percent of Kakumba families practice burning. In contrast, 79 percent of families in the comparison watershed burned their fields.
- 47 percent of families are planting native trees. Before the pilot, this wasn't a focus for communities. In the comparison watershed, only 2 percent of families are planting native species.

**Improving Soil.** Kakumba families saw a 28 percent improvement in soil quality since 2015. The comparison watershed saw a decrease in perceived soil health over the same time.

- Kakumba families are actively protecting 2,245 square meters of land per family (a little more than half a football field). Instead of using unsustainable techniques such as slash and burn, families are focusing on soil conservation and reforestation. Combined, Kakumba families are protecting 44.4 percent of available land.



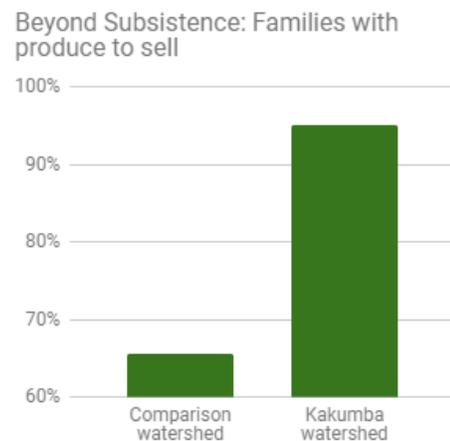
## Economic Development

Being a subsistence farmer is a high-risk vocation. Family income is dependent on crop yields and markets at the time of harvest, while the bulk of expenses come up front during planting season. With no financial safety net, an unpredictable storm or a failed crop can mean severe hunger and malnutrition for farming families.

### MANAGING RISK AND INCREASING RESILIENCE

There are several ways farmers can reduce and manage risk. Plant With Purpose partners with farming families to mitigate risk through access to financial services in the form of savings and loan groups, encouraging the planting of diverse crops, and diversifying income sources by empowering entrepreneurship.

- **Families are diversifying their farms.** Kakumba families are growing a diversity of crops, including 82 percent more varieties than they did in 2015. This is a substantial deviation from the comparison watershed.
- **Families are diversifying their income sources.** 65 percent of Kakumba families started a side business in the past year in addition to farming their land. In rural areas, agriculture is almost always the leading source of income for families, but side businesses can help reduce risk and bring in additional income.
- **Families are moving beyond subsistence agriculture.** 95 percent of Kakumba families were able to sell some of their crops, compared with only 66 percent in the comparison watershed.



### BUILDING ASSETS

One of the clearest signs that families are climbing out of poverty is that they begin to accumulate assets. Assets can be financial or investments in their property, farm, business, and family. Investing in a

child's education is also a way to build a family's future and is an investment most farming families choose to make when they have the option.

- **Building cash savings:** Kakumba families have 2.5 months of emergency cash savings set aside. Families in the comparison watershed have enough savings set aside to cover only two days' expenses.
- **Families invested heavily in animals.** 30 percent of Kakumba families receive income from an animal (dairy goat, etc), compared with 10 percent in the comparison watershed. In 2015, only four percent of families claimed income from animals, a traditional indicator of wealth. .
- **Investing in tomorrow.** Families are also expanding their houses, protecting their land, and sending their children to school.

## Spiritual Renewal

**Recognizing that poverty is not just a lack of material things,** spiritual renewal is an integral part of our work at Plant With Purpose. Everything we do stems from a call to love as God called us to love. We strive to stay focused on Christ in all that we do, teaching spiritual values that promote reconciliation, self-esteem, hopefulness and a sense of empowerment. This emphasis has yielded the following results:

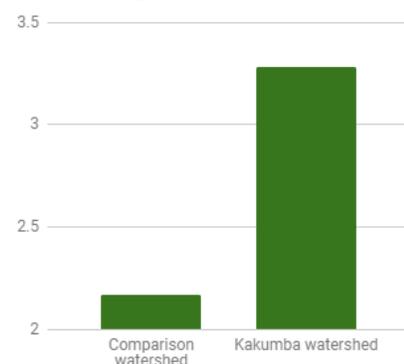
- **Families are acting out their faith through service.** Kakumba families are helping their neighbor 2.2 times more often than families in the comparison watershed.
- **Families are increasingly turning to faith.** Twice as many people agreed with the statement, "My faith sustains me in challenging circumstances" in the Kakumba watershed than in the comparison group. In a focus group, participants mentioned that pastors in Kakumba have started actively engaging in community peace building efforts as a result of Plant With Purpose. This is further corroborated by some exciting anecdotal stories of reconciliation.

## EMPOWERMENT

Much of the spiritual renewal work in the DRC is focused on teaching about dignity and the value of work as part of a healthy spiritual life. Families are learning to grow spiritually in the midst of service, community engagement, and taking care of the land. People are finding purpose, rooted in faith.

- **Community mobilization** more than doubled. 91 percent of Kakumba families said that members of their community work together to change things that are wrong. Only 42 percent of the comparison watershed agreed with that statement.
- **Women are empowered** in the Kakumba watershed. 15 percent of women in the Kakumba watershed hold leadership positions compared with only 4 percent in the comparison group.

"The work I do is a good use of my talents"  
Families who agree on a scale of 1 to 5; 5 is high



## Quality of Life – Growing out of Poverty

All this improvement leads to families living healthier, more confident lives. Ending poverty is about more than making physical improvements in peoples' lives. It is about generating hope, realizing potential, and creating opportunities for dreams to become realities. A key indicator of this change includes:

**Families are sending girls to school.** One of the most vulnerable groups of potential students are secondary school aged girls. When it's difficult to pay school fees, these girls are often the first to stay home and work instead of attending school. In 2017, Kakumba families sent eligible secondary school girls to school 2.6 times more frequently than they did in 2015. This same group in the comparison watershed saw a 27 percent decline in attendance over the same time.

## Moving Forward – Applying Lessons Learned at Scale

Overall, the impact in the DRC pilot project exceeded expectations. Plant With Purpose has seen similar reductions in poverty level elsewhere, but never this quickly. Families in Kakumba have achieved in two years what we have seen take five to six years elsewhere. This is due to a number of factors:

- a) Extreme poverty levels at the time of the baseline: Kakumba families (and those in nearby watersheds) have a lot of room for growth.
- b) Concentrated program implementation: Prior Plant With Purpose research and trials have indicated that the impact of Plant With Purpose program model is maximized when applied among a critical mass of families and farms within a watershed. This is the first time we have launched a new watershed without any existing Plant With Purpose programs nearby.
- c) Community attitudes: Families in this region are hungry for assistance. They have struggled through long periods of conflict and isolation. Markets are still only beginning to open as a result of recent stretches of peace. Families are responding with a willingness to work hard and try new ideas.

### NEXT STEPS

As a result of the success of this pilot project, Plant With Purpose plans to scale the program by replicating this project in additional watersheds in the South Kivu region of the DRC. We are currently in the process of identifying these new watersheds and planning the next steps towards expansion, which is scheduled to begin in July 2018.

We are also working to reach a critical mass of participation in the Kakumba watershed. At the time of the study, only 33 percent of families in the watershed were active participants in the program. Since many families saw the success of the early adopters, the demand is high and we expect that we will reach the 60 percent saturation goal (critical mass) by December 2017. A follow-up study is scheduled for 2020. We expect the impact to continue to grow.

Plant With Purpose is also in the process of launching a new pilot project in Ethiopia. We will begin with a pilot project very similar to this one conducted in the DRC. We expect results in Ethiopia to be similarly positive and have the potential to be replicated across larger regions as well.

We will also take lessons learned from the DRC pilot project and apply them to watersheds and programs across the six existing Plant With Purpose programs. Impact evaluations like this one are being held across all Plant With Purpose programs during the fall of 2017 and a global impact report will be published in 2018.